CITY OF HARTFORD

Annual Drinking Water Quality Report

January 1, 2016 – December 31, 2016

Introduction

The purpose of this report is to inform you of the quality of the drinking water that the City of Hartford (City) purchases from the Minnehaha Community Water Corporation (MCWC) and provides to you. MCWC and the City are required by the U.S. Environmental Protection Agency (EPA) to test our water frequently for the presence and concentrations of over 80 different substances. The South Dakota Department of Environment and Natural Resources (DENR) reviews all of our testing data to ensure that 1) we are providing safe drinking water to our customers, and 2) we are complying with EPA regulations.

We want you to fully understand the information contained in this report. If you have any questions, please contact:

Craig Wagner
Public Works Superintendent
City of Hartford
125 N Main Avenue
Hartford, SD 57033
Phone: 605-528-6509

Where does our water come from?

MCWC source for our drinking water is ground water that is produced from local wells. The State of South Dakota has performed an assessment of the source water and they have determined that the relative susceptibility rating for MCWC public water supply system is medium.

Why do we test our drinking water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Information provided by the EPA

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants can be obtained by calling the Environment Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The MCWC public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Definition of Terms

The following definitions are provided to assist you in understanding our water quality test results and the following discussion of the results.

Action Level (AL) - The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For Lead and Copper, 90% of the samples must be below the AL.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water. For turbidity, 95% of samples must be less than 0.3 NTU.

**pCi/l: picocuries per liter (a measure of radioactivity)*

**ppm: parts per million, or milligrams per liter (mg/l)*

**ppb: parts per billion, or micrograms per liter (ug/l)*

**MFL: million fibers per liter*

**ppt: parts per trillion, or nanograms per liter*

**ppq: parts per quadrillion, or picograms per liter*

**pspm: positive samples per month*

**NTU: Nephelometric Turbidity Units*

**mrem/year: millirems per year (a measure of radiation absorbed by the body)*

2016 Water Quality Test Results (MCWC)

The attached table lists all the drinking water contaminants that MCWC detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2016. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Substance	Date Tested	Highest Level Detected	Range	Ideal Goals (MCLG)	Highest Level Allowed (MCL)	Major source of substance
Alpha Emitters	04/30/12	1.0 pC/l	ND-1	0	15 pCi/l	Erosion of natural deposits
Antimony	11/15/12	0.4 ppb	ND-0.4	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	11/15/12	0.017 ppm	0.015-0.017	2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Chromium	11/15/12	0.8 ppb	0.7-0.8	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	11/07/16	0.94 ppm	0.3 -0.94	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Fluoride*	11/30/15	1.15 ppm	1.00-1.15	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids	09/03/13	6.13 ppb	6.12 – 28.0	0	60	By-product of drinking water chlorination
Nitrate (as Nitrogen)	05/19/16	0.3 ppm		10	10	Runoff from fertilizer use; leaking from septic tanks; erosion of natural deposits
Nitrate (as Nitrogen)*	09/21/15	0.5 ppm		10	10	Runoff from fertilizer use; leaking from septic tanks; erosion of natural deposits
Selenium	11/15/12	1.7 ppb	1.1-1.7	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Total Trihalomethanes	09/03/13	28.3 ppb	13.6 – 37.0	0	80	By-products of drinking water chlorination
Substance	**Date Tested**	**90% Level**	**Test Sites > Action Level**	**Ideal Goals**	**Highest Level Allowed (AL)**	**Likely source of substance**
Copper	08/27/14	0.0 ppm	0	0	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives
Lead	08/27/14	0 ppb	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

*-Lewis & Clark Regional Water System (2288) test result.

2016 Water Quality Test Results (City of Hartford) EPA #0150

Substance	90% Level	Test Sites > Action Level	Date Tested	Highest Level Allowed (AL)	Ideal Goal	Units	Major Source of Contaminant
Copper	0.0	0	08/27/14	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	0	0	08/27/14	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits

UNITS:

MFL: million fibers per liter
mrem/year: millirems per year (a measure of radiation absorbed by the body)
NTU: Nephelometric Turbidity Unit
pCi/l: picocuries per liter (a measure of radioactivity)
ppm: parts per million, or milligrams per liter (mg/l)
ppb: parts per billion, or micrograms per liter (ug/l)
ppt: parts per trillion, or nanograms per liter
ppq: parts per quadrillion, or picograms per liter
pspm: positive samples per month

2016 Violations for the City of Hartford

No violations

City of Hartford Awards

- The South Dakota Association of Rural Water Systems named the City of Hartford as the 2003 Rural Water System of the Year.
- The 1995 SDWEA "Rookie of the Year" was awarded to Craig Wagner of the City of Hartford for water quality and plant operations.
- The South Dakota Department of Environment and Natural Resources (DENR) awarded the City of Hartford public water system and certified operator, Craig Wagner, with a 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013 Drinking Water Certificate of Achievement Award for Safe Drinking Water.
- In 2014 and 2015 the South Dakota Department of Environment and Natural Resources (DENR) awarded the City of Hartford public water system and system operation specialists Craig Wagner and Neil Hanisch with the Secretary's Award for Drinking Water Excellence.
- In 2016 the South Dakota Department of Environment and Natural Resources (DENR) awarded the City of Hartford public water system and system operation specialists Craig Wagner, Neil Hanisch, and Jesse O'Kane with the Secretary's Award for Drinking Water Excellence.

Summary of 2016 Water Quality Test Results

We are pleased to report that in 2016, MCWC served more than 2,634 customers in the City of Hartford and provided a daily average of 214,000 gallons of safe, good tasting, high quality drinking water that was in compliance with all EPA and state water quality standards. For 2016, MCWC and the City conducted tests for more than 80 substances. Of those tests only those substances shown in the table were detected in reportable levels and as the table shows, all of those levels were below the allowable limits.

Public water suppliers are one of the most heavily regulated of all industries in the United States. The safety of our product is always our number one concern and you can rest assured that our water is safe to drink.

We Welcome Your Input

The Hartford City Council meets the first and third Tuesdays of each month at 7:00 p.m. at Hartford City Hall, 125 N. Main Avenue, Hartford, South Dakota. If you would like to attend one of the city council meetings, please notify us at 605-528-6187.

FOR ADDITONAL INFORMATION, YOU MAY CONTACT:

Brian Benda
Minnehaha Community Water Corporation
47381 248th Street
Dell Rapids, SD 57022
Phone: 605-428-3374

Craig Wagner
City of Hartford
125 N Main Avenue
Sioux Falls, SD 57033
Phone: 605-528-6509